REMARKS

Claims 1-40 are now pending in the application. Applicants note that the amendment made to claim 1 has been made merely for purposes of clarity, as claim 1 includes features that already define over the art of record.

REJECTION UNDER 35 U.S.C. § 103

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6,181,927) in view of Patel (U.S. Pat. No. 5,835,856). This rejection is respectfully traversed.

Applicants respectfully submit that neither Welling Jr. nor Patel teach or suggest a system of billing in a user configurable wireless network, comprising, at least:

> a service data node module <u>in direct operative communication with the base station controller</u> . . . the service data node <u>allowing the user to implement service creation and service negotiation without service provider intervention</u>;

in combination with the other features or structural correlation recited in claim 1.

The Examiner alleges that such is taught in Welling, Jr., relying on elements 32 and 42 in FIG. 1, and col. 2, lines 49-53. Applicants disagree, and provide relevant portions of Welling, Jr. et al. for the following discussion (underlining for emphasis).

> A switching center (SC) 12 is connected to a public switched telephone network (PSTN) 10. Connected to the switching center 12 as shown are three base station controllers (BSC) 14, 16 and 18. In a standard system, each BSC 14, 16, 18 is connected to one or more base stations (BTS) (col. 2, lines 19-26)

> The SCP 42 is an intelligent node that executes service logic when required based on certain criteria involved in the call origination. . . . Some calls are basic calls that are routed (i.e. connected) <u>through the switching center 12 to a destination, while other calls cause initiation of a service application program depending on certain characteristics of the call</u> (e.g., 1-800 calling, debit card calling, etc.). The SCP 42 <u>receives service requests from the switching center 12.</u>

These requests initiate one or more service application programs (service logic) that control processing of the call. (col. 2, line 65 to col. 3, line 6)

. . . In the wireless system, <u>the switching center 12 is sometimes referred to as the mobile switching center (MSC)</u>. (col. 3, lines 21-23)

The switching center 12 receives the call origination (and information) from the subscriber station 32 via the BTS 26 and the BSC 16. By communicating through the BTS 26 (and/or BSC 16) <u>to the switching center 12</u>, the location of the subscriber station is known.

Call origination information is used to "trigger" execution of a service application program (or service logic) by the SCP 42. The service application program controls processing of the call in accordance with the functionality of the service application program. The present invention includes a <u>service application program</u> which, when invoked, <u>selects a message to be transmitted and played to the subscriber station</u>. The message is selected based on subscriber station attributes or characteristics. (col. 3, lines 5-64)

As shown in Figure 1 of Welling, Jr., et al., SCP 42 is not in direct operative communication with the BSC 16. In fact, all call originations must go through BSC 16 via switching center 12 to SCP 42. Further, there is no teaching or suggestion of the SCP 42 allowing the user to implement <u>service creation and service negotiation without service provider intervention</u>. This is because SCP 42 transmissions must go through switching center 12 to perform implementation of the service application program which, when invoked, <u>merely selects a message to be transmitted and played to a subscriber station</u>. This is neither <u>service creation</u> nor <u>service negotiation</u> as recited in independent claim 1.

SCP 42 then provides a service application program to transmit a <u>selected message</u> based on a <u>triggering event</u>. Moreover, as substantial service provider interaction is required, via switching center 12, there is no direct communication

between the BSC 16 and the SCP 42. For at least this reason, Applicants submit that the rejection is improper. Withdrawal of the rejection is kindly requested.

With regard to claim 3, Applicants provide relevant passages of Patel relied upon by the Examiner below, to illustrate further distinctions over Patel:

> For charging purposes, a charging subsystem module (CHS) 100 . . produces a Toll Ticket (TT, also known as Call Detail Record-CDR) when the call is terminated . . . Such produced TT is then transported to the billing center 110 for producing subscriber billing statements. The actual transportation from the serving MSC 30 to the billing center 110 can be accomplished in a number of different ways. Using a packet data network such as an X.25 network, the generated TTs can be communicated over to the billing center 110. Alternatively, the generated TTs can be stored on a magnetic tape and physically transported to the billing center 110. After receiving the generated TTs, the billing center 110 consolidates all TTs associated with each subscription, reformats the TT stored information, calculates the cost of each call in accordance with each subscription agreement, and generates billing statements for its subscribers. Such billing statements are then sent to the subscribers for charging purposes.
>
> The billing statements received by the mobile subscribers only contain the above mentioned system defined information. With such limited information, it is later difficult to ascertain the identity or purpose of each call stated in the received billing statements. Also, because the subscriber cannot enter subscriber defined text messages for a particular call, the subscriber is not able to make notes or comments regarding the call. (col. 3, lines 25-54)

Referring to the above passage, the billing center 110 in Patel, at best, is a billing processor in operative connection with a mobile switching center (MSC) 30 to process data received from the MSC 30. The passage above does not recite any of (1) a billing mediator, (2) a billing order manager, or (3) a customer information processor, as recited in claim 3, or any of the functions performed by (1) - (3) as recited in claim 3. Accordingly, dependent claim 3 is allowable at least for these additional reasons, in addition to its allowance by way of being dependent off of independent claim 1.

Claims 4-34 and 37-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6,181,927) in view of Lohtia, et al. (U.S. Patent Publication No. 2003/0211845). This rejection is respectfully traversed.

With regard to claims 4 and 11, Applicants respectfully submit that neither Welling, Jr., et al. nor Lohtia et al. teach or suggest a system allowing service creation and negotiation in a wireless network, comprising, at least: a central processing node to process the request by comparing the request with user information, service information, and network information dynamically stored therein, and to provide the requested service to the user based upon the comparison.

The Examiner alleges that such is taught in Lohtia et al., relying on paragraph [0021] of Lohtia et al. However, paragraph [0021] does not indicate anything related to a central processing node that processes a request by comparing the request with each of user information, service information and network information dynamically stored therein. Referring to paragraph [0021], at best the information stored in the database is a service information profile comprising user information and possibly some type of service information. However, neither of this information is dynamically stored (i.e., stored in essentially real time). There is no network information that is dynamically stored in a central processing node as described in Lohtia et al. For at least this reason, Applicants submit that claims 4 and 11 define over the art of record and request withdrawal of the rejection.

With regard to claims 18, 21, 24 and 29, Applicants respectfully submit that neither Welling, Jr., et al. nor Lohtia et al. teach or suggest a method of billing a service creation and/or negotiation in a wireless network, comprising at least: (a) obtaining, from

the storage, <u>network information associated with the user information</u>; and (b) comparing the request with the user information <u>and the associated network information</u>; in combination with the other features recited in claim 18, and as somewhat similarly recited in each of method claims 21, 24 and 29. The Examiner continues to rely on the same paragraph [0021] in Lohtia et al. to allege a teaching of (a) and (b) above. However, Applicants have reviewed the passage relied on by the Examiner, and cannot find <u>any teaching or suggestion of obtaining network information</u> associated with user information from a storage or comparing the request with both the user information <u>and associated network information</u>, as recited in the claims. For at least these reasons, Applicants submit that each of claims 18, 21, 24 and 29 are allowable over the Welling/Lohtia combination.

With regard to claim 34, Applicants respectfully submit that neither Welling Jr., et al. nor Lohtia et al. teach or suggest a method of billing in a wireless network communication system, the method comprising at least <u>allowing a user to select a service by accessing the database without service provider interruption</u>; in combination with the other features recited in claim 34. As discussed above, <u>significant service provider interaction is required in Welling Jr.</u>, et al. via switching center 12. There is no indication in either Welling Jr., et al. or Lohtia et al that a service may be selected by <u>accessing a given database without any service provider intervention</u>. The Examiner continues to rely on paragraph [0021] *ad nauseum* to allege a teaching of this feature. However, in the absence of any evidence in paragraph [0021], Applicants kindly request the Examiner to <u>explicitly point out</u> where such is taught in either Welling Jr. et al. or Lohtia et al., or to withdraw the rejection as pertaining to claim 34.

Claims 5-10, 12-17, 19, 20, 22, 23, 25-28, 30-33, 37 and 38 are submitted to be allowable at least for the reasons set forth above regarding their corresponding independent claims 4, 11, 18, 21, 24, 29 and 34. However, various ones of these dependent claims include features that further define over Welling, Jr. and Lohtia., as set forth below.

a. Claims 9, 12, 14-17, 19, 20, 22, 23, 26-28, 30, 32, 33

The examiner relies on a single passage in Welling, Jr. to reject these claims, reprinted below (underlining for emphasis):

> A subscriber station attribute is <u>any personal or public information relating to the owner or user of the subscriber station</u>, or information relating to the subscriber station itself. Such personal or public information may include <u>age, sex, race, religion, family history, income, or the like, or any other information about the owner or user (i.e. profile information)</u>. Subscriber station attributes also include information relating to the subscriber station itself such as <u>time of the call, day of week of call, origination location of the call, location of the subscriber station</u>, and the like, or any other information about the subscriber station or the originated call. As used herein, <u>the term subscriber station refers to the caller or station user (mobile or stationary), or the actual hardware unit used by the caller or station user for communicating</u>.

> Triggering is initiated based on the presence (or absence) of particular data contained in the call origination information. In the present invention, triggering the execution of the service application program may occur in one of two ways. Preferably, the trigger is based on the <u>subscriber station ID</u> (MSISDN). The subscriber station ID is compared to a list of <u>station IDs</u> contained in a database 50. . . .The database 50 is shown internal to the SCP 42 (see FIG. 1), but it may also be provisioned external to the SCP 42, or within another node or device within the telecommunications system, <u>such as the switching center 12</u>. In this method of triggering, the call origination is <u>forwarded by the switching center 12 to the SCP 42</u>, as identified by a reference numeral 204. The SCP 42 performs the comparison and triggering function. Alternatively, the switching center 12 performs the triggering utilizing triggering information from the HLR 40.

As already discussed in some detail above, and as further evident in the underlined sections of the above passage, the only comparison done anywhere in Welling Jr. et al. is between <u>user information</u> and a <u>subscriber station information</u> (the

subscriber station being the mobile phone of the user, for example. Therefore, Applicants do not see where the above passage teaches any of the following recited features:

1. A central processing node with a first database having the network information dynamically stored therein (claims 5, 7, 12, 26, 30);

2. A central processing node having a second database with the user information dynamically stored therein (claims 6, 8, 13, 27);

3. A central processing node that compares the network information and the user information without having to access any other portions of the wireless network (claims 9, 14, 20, 23, 28, 32);

4. A central processing node that periodically updates the network information and the user information (claims 10, 15, 19, 22, 25).

Accordingly, unless the Examiner can provide another supporting reference or identify another reference included in the art of record, Applicants submit that these dependent claims further distinguish over the combination of Welling, Jr., et al. for the above additional reasons.

Claim 35 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6, 181, 927) and Lohtia, et al. (U.S. Patent Publication No. 2003/0211845) further in view of Patel (U.S. Patent No. 5,835,856). This rejection is respectfully traversed.

Applicants submit that claim 35 is allowable at least for the reasons set forth above regarding independent claim 34. Withdrawal of the rejection is therefore kindly requested.

Claim 39 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6,181,927) and Lohtia, et al. (U.S. Patent Publication No. 2003/0211845) further in view of Sarkki, et al. (U.S. Patent No. 6,373,933). This rejection is respectfully traversed.

Applicants submit that claim 39 is allowable at least for the reasons set forth above regarding independent claim 34. Withdrawal of the rejection as to claim 39 is therefore kindly requested.

Claim 40 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6, 181, 927) and Lohtia, et al. (U.S. Patent Publication No. 2003/0211845) further in view of Cook, et al. (U.S. Patent No. 5,974,331). This rejection is respectfully traversed.

Applicants submit that claim 40 is allowable at least for the reasons set forth above regarding independent claim 34. Withdrawal of the rejection as to claim 40 is therefore kindly requested.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6, 181, 927) and Patel (U.S. Patent No. 5,835,856) further in view of Bianconi, et al. (U.S. Patent Publication No. 2002/0119766). This rejection is respectfully traversed.

Applicants submit that claim 2 is allowable at least for the reasons set forth above regarding independent claim 1. Withdrawal of the rejection as to claim 2 is therefore kindly requested.

Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Welling, Jr., et al. (U.S. Patent No. 6, 181, 927) and Lohtia, et al. (U.S. Patent Publication No. 2003/0211845) further in view of Bianconi, et al. (U.S. Patent Publication No. 2002/0119766). This rejection is respectfully traversed.

Applicants submit that claim 36 is allowable at least for the reasons set forth above regarding independent claim 34. Withdrawal of the rejection as to claim 36 is therefore kindly requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-40 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew J. Lattig at the telephone number of the undersigned below.

In the event this Response does not place the present application in condition for allowance, applicant requests the Examiner to contact the undersigned at (703) 668-8000 to schedule a personal interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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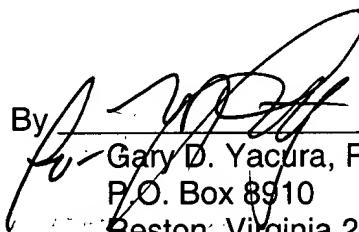
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